

Xbus Master

Real-time 3D multi-sensor motion capturing system

The Xbus Master is a lightweight, portable device that controls multiple Motion Trackers (MT9/MT6) on the Xbus, Xsens' digital data bus system. The Xbus Master samples digital data from the MT9s and supplies power to the MT9s. The Xbus Master can be connected to a PDA or PC via serial cable or wireless connection, where the data is logged or used in any real-time software application.

Features

- Connects multiple Motion Trackers (MT9/MT6) on one or two Xbus strings
- Synchronous sampling of multiple MT9s at adjustable sample frequencies up to 340Hz
- Compatible with PDA and PC via standard RS-232 interface or wireless Bluetooth connection
- Compatible with Xsens MT9 software and software development tools
- External triggering & notification of trigger moment available for synchronization
- Runs on batteries or external power supply
- Battery low indicator
- Supplies power to MT9s
- Ergonomic design with elastic strap
- Easy to use

Fields of use

- Biomechanics
- Ergonomics
- Rehabilitation
- Exercise and sports
- Virtual Reality
- Animation

Together with a set of MT9s, the Xbus Master enables ambulatory motion capturing of the human body. The MT9s measure 3D rate-of-turn, acceleration and magnetic field, and software calculates 3D orientation of each body segment. All Xsens' MT9 software and software development tools are Xbus compatible.



Specifications

Xbus

Type	RS-485
Speed	460k8 bits/sec
Number of Xbus connectors	2 (enables 2 Xbus strings)
Sample frequency	Adjustable up to 340Hz
Example configuration	5x MT9 at 100Hz sample frequency

Host interface

Type	RS-232
Speed	115k2 bits/sec
Type (optional)	Bluetooth

Xbus units

Xbus compatible Motion Trackers	MTx-x-49xxx Xsens
Xbus compatible user-defined sensors	For 3rd party Xbus developers

Software

MT9 software	Logging and 3D orientation calculation and visualization
MT9 SDK (optional)	Integration of MT9 software in own software application

Power

Operating voltage	6V
Supply current (Xbus Master only)	30 mA
Max supply current (with 5x MT9)	250 mA
Batteries	4x AA (included)
Minimum battery powered operating time	5 hr (5x MT9 at 100Hz)
Power adapter (optional)	6V DC 1A

Physical specifications

Dimensions	10 x 15 x 4 cm (W x L x H)
Weight (incl 4x AA batteries)	268 g (172 g excl batteries)

